Aquinas & Evolution

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To show the substantial incompatibility (contradiction) between Thomas Aquinas's teachings and theistic evolution we need to refer to the two levels of his intellectual enterprise. One is the level of philosophy (metaphysics); the other is the level of theology. Whereas philosophy is based entirely on the principles of natural reason and being (reality) without the help of revelation, theology is a rational reflection on the supernatural revelation given by God. These two levels can hardly be separated in Aquinas. Aquinas's philosophy excludes the three grand claims of theistic evolution. Additionally, his theology contains a positive doctrine of creation which is quite different from theistic evolution.

Philosophical Objections to Theistic Evolution

There are at least five reasons why Aquinas's philosophy excludes theistic evolution.

Reason 1.

Every material being (i.e., composite being) is in between act and potency; it has some act and some potency. The more potency is actualized in a being, the more perfect it is. Granting for the sake of argument the existence of macroevolutionary change, we see that the older species would have less act and more potency, whereas the newer ones would be more actualized, that is, more perfect. Therefore, much potency in matter would have been actualized in the course of life's history on earth. But no potency can actualize itself into act. To actualize potency something actual is needed. Further, it is supposed that in the macroevolutionary process lower (that is less perfect) organisms generate higher (that is more perfect) organisms. And this is contrary to the principle of sufficient reason which says that a lesser cause cannot bring about a greater effect. To achieve the perfection present in higher animals a higher cause is needed than the power of generation in the lower animals or plants. Thus, macroevolution contradicts the metaphysical principle of potency and act as well as the principle of sufficient reason. Macroevolution is therefore impossible. And if macroevolution cannot have occurred, then theistic evolution is ruled out.

Reason 2.

Any and all changes observed in the process of evolution are merely accidental, which means they affect only the accidental form. But the emergence of a new species entails the production of a new substantial form. Therefore, it doesn't matter how long evolution works and how many accidental changes it accumulates over time; it will never produce a new species. It doesn't even matter whether the accidental changes are random or guided by an intellect, they will never produce the substantial change. The grand claim of transformation of species due to the accumulation of accidental changes contradicts the fundamental metaphysical division of being into substance and accidents.

There are two possible errors in the understanding of this argument. The first thrives on confusion between the substantial and the individual form. Someone could say that killing a chicken brings about substantial change, but the act of killing the chicken is an accidental change. Hence, the accidental change results in the substantial change. But in this example, killing this particular chicken annihilates the substantial form of this particular chicken which is nothing else but the individual form of this chicken. The substantial form (or a species) of chicken as such is neither annihilated nor altered by this accidental change. Moreover, no accidental change could ever produce a totally new substantial form (species), one that has never existed, which would be the case if theistic evolution were true. Thus, even though an accidental change may substantially change an individual it cannot change the species of a thing or produce a new nature.¹

The second error thrives on the misunderstanding of what substance is. Someone could say, if I take hydrogen and oxygen and combine them I make water which is a different substance from hydrogen or oxygen. The act of blending hydrogen and oxygen is an accidental change, therefore the accidental change of one substance brings about another substance. Hence, the accidental change results in the substantial change. In this example, however, we do not deal with substances but with merely elements and compounds. Substance is an analogous term, which means that it is predicated about different things with regard to one. Substance is something that is the most self-contained, separated, unified and distinct. Hence, the only true substance is God, because He is the most individual, the most indivisible, and simply the most "Is". Everything else is a substance only by participation. Living beings constitute substances in a much stronger sense than non-living beings, to the point that the latter should not even be called substances but elements and compounds. And if we consider a true substance there is no way to transform it into another substance by an accidental change.

Reason 3.

Every material being has the four causes. But in theistic evolution the efficient cause of the production of species is variation and selection which are merely material changes. Thus in theistic evolution the efficient cause is reduced to the material cause. According to Thomistic metaphysics, every being tends to preserve its form. But in theistic evolution every being tends to be something else and so tends to exceed its form in order to follow the final cause which drives the evolutionary process. In effect, the formal cause is reduced to the final cause. Therefore in theistic evolution there are only two causes out of four. Consequently, theistic evolution lacks the metaphysical understanding of causality. It cannot explain the material being and contradicts Thomistic philosophy.

¹ One of the best attempts to reconcile biological macroevolution with Thomistic philosophy is George P. Klubertanz's paper "Causality and Evolution". However, the author ends up in precisely this error – he takes production of a new accidental form for the production of the new substantial form. See: Idem, "Causality and Evolution" [in:] The Modern Schoolman, Nov. 1941, 19(1), pp. 11–14.

Reason 4.

According to Thomas Aquinas, a thing can begin to exist in either of two ways: by creation or by change. There are different types of changes, such as mutation, alteration, generation, or any type of movement. Evolution is also a type of change. Aquinas says that there are four things that cannot start to exist by a change but need to be created instead. These are: angels, souls, the matter of the elements, and the first hypostases in each species, such as the first man, the first lion, etc. The reason first hypostases must be created directly by God is that they require an agent (a parent) in their generation—if there is no parent they cannot be generated (i.e. start to exist by a change). In case of the first man Aquinas explains:

The first formation of the human body could not be by the instrumentality of any created power, but was immediately from God.... [A] form which is in matter should be the cause of another form that is in matter, because composite is made by composite. Now God, though He is absolutely immaterial, can alone by His own power produce matter by creation: wherefore He alone can produce a form in matter, without the aid of any preceding material form.... Therefore as no pre-existing body has been formed whereby another body of the same species could be generated, the first human body was of necessity made immediately by God. (S.Th. I,91,2 co).

Thus, for Aquinas, there is no way in which a new species can start to exist except by creation. This is based not just on the interpretation of Genesis but on a metaphysical necessity. Creation of first hypostases is required by metaphysics, independently from revelation. As such it is a matter of natural reason. This is confirmed in Aristotle, who did not know Genesis but maintained that species were eternal along with the universe. Philosophically, species are either eternal or created directly by God as first representatives. Thanks to the Christian revelation, Aquinas can reject the eternity of species and embrace their creation.

Reason 5.

In another place Aquinas explicitly contradicts the core tenet of theistic evolution that the universe and all species were formed by natural laws and properties endowed by God in the first creation:

The institution of the natural things may be considered in two ways: either regarding the mode of becoming or regarding the properties following the instituted things. The mode of becoming cannot be natural, because there were no natural principles existing beforehand whose actions and passions would suffice to produce the effect naturally. So it was necessary that the first principles in nature were constituted by supernatural power (virtus supernaturalis). This refers to the formation of the human body from earth and the body of the woman from the rib, and so on (Super Sent. Lib. 2 d.18 q.1 a.1 ad 5).

Theological Objections to Theistic Evolution

Aquinas's theology excludes theistic evolution because Thomas has a quite clear explanation of the origin of species which is very different from that of theistic evolution.

Thomas Aquinas, following the Catholic tradition, says that the universe was not only created in the beginning out of nothing (*creatio ex nihilo*) but also formed supernaturally over a period of time described in Genesis as the six days. But the supernatural formation has been completed once for all with the creation of man and nothing entirely new can begin to exist afterwards. Aquinas speaks about two stages of formation – the work of distinction (*opus distinctionis*) and the work of adornment (*opus ornatus*) (S.Th. I,66-74). At the first of these stages God divided matter into basic forms, such as the heavens and the Earth, and on Earth things that are bound to the earth, like plants. At the second stage, God created moving things —sun and moon and stars, animals, and man—to adorn the basic divisions.

It is important to notice that Aquinas follows the literal understanding of the Bible. Contrary to St. Thomas, Thomistic evolutionists opt for a highly figurative reading of Genesis. They also either try to prove that Aquinas's reading was also figurative or that he would follow modern exegesis supporting figurative reading if he had known modern science. But creation is supernatural and by definition cannot be an object of natural science. Therefore, as much as science can modify our understanding of how things operate and change over time, it cannot establish that things that need to be created were not created. Aquinas was aware of the progress of natural knowledge and theories of nature. For example, he believed that the explanation of the planetary movements, which in his time was geocentrism, could change in the future, if a better theory were invented. In a way he anticipated the Copernican revolution. Yet, regarding the origin of species, both the Bible and metaphysics exclude their natural emergence. This is clear in fragments like this:

In the first production of corporeal creatures no transmutation from potentiality to act can have taken place, and accordingly, the corporeal forms that bodies had when first produced came immediately from God, whose bidding alone matter obeys, as its own proper cause. To signify this, Moses prefaces each work with the words, "God said, Let this thing be," or "that," to denote the formation of all things by the Word of God(S.Th. I, 65,4 co).